

Title (en)

A cutter wheel for forming scribe lines on brittle materials

Title (de)

Schneidrad zum Einkerben von spröden Materialien

Title (fr)

Molette pour entailler des matériaux cassants

Publication

EP 1177870 B1 20070516 (EN)

Application

EP 01118604 A 20010802

Priority

JP 2000237241 A 20000804

Abstract (en)

[origin: EP1177870A2] A cutter wheel for forming scribe lines on brittle materials has a disk with two side planes. The disk has an edge formed at an outer periphery of the disk and a shaft hole formed at the center of the disk for inserting a rotational shaft. Further, at least one groove is formed to extend from one surface of two side planes along the shaft hole. <IMAGE> <IMAGE>

IPC 8 full level

B26D 1/14 (2006.01); **B28D 1/24** (2006.01); **B28D 1/22** (2006.01); **B28D 5/00** (2006.01); **C03B 33/10** (2006.01); **H01L 21/301** (2006.01);
H05K 1/03 (2006.01); H05K 3/00 (2006.01)

CPC (source: EP KR US)

B26D 1/14 (2013.01 - KR); **B28D 1/225** (2013.01 - EP US); **B28D 1/24** (2013.01 - EP US); **C03B 33/107** (2013.01 - EP US);
H05K 1/0306 (2013.01 - EP US); H05K 3/0052 (2013.01 - EP US); Y10T 83/0385 (2015.04 - EP US)

Cited by

ES2326581A1; WO2009071724A1; TWI586508B

Designated contracting state (EPC)

BE CH DE FR GB IT LI

DOCDB simple family (publication)

EP 1177870 A2 20020206; **EP 1177870 A3 20020605**; **EP 1177870 B1 20070516**; CN 1261282 C 20060628; CN 1337298 A 20020227;
DE 60128425 D1 20070628; DE 60128425 T2 20080214; JP 2002050592 A 20020215; JP 3370314 B2 20030127; KR 100583613 B1 20060526;
KR 20020012115 A 20020215; TW 506948 B 20021021; US 2002033087 A1 20020321; US 6629484 B2 20031007

DOCDB simple family (application)

EP 01118604 A 20010802; CN 01122552 A 20010704; DE 60128425 T 20010802; JP 2000237241 A 20000804; KR 20010032021 A 20010608;
TW 90113561 A 20010605; US 91981201 A 20010802